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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/689,232	10/20/2003	Alan A. Gilmore	0275D-113COE	4076
27572	7590	11/03/2005	EXAMINER	
HARNESS, DICKEY & PIERCE, P.L.C. P.O. BOX 828 BLOOMFIELD HILLS, MI 48303			DUDA, RINA I	
			ART UNIT	PAPER NUMBER
			2837	

DATE MAILED: 11/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/689,232

Applicant(s)

GILMORE, ALAN A.

Examiner

Rina I. Duda

Art Unit

2837

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 21-80 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 21-80 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

1. In view of the appeal brief filed on 8/8/05, PROSECUTION IS HEREBY REOPENED. New grounds of rejections are set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) initiate a new appeal by filing a notice of appeal under 37 CFR 41.31 followed by an appeal brief under 37 CFR 41.37. The previously paid notice of appeal fee and appeal brief fee can be applied to the new appeal. If, however, the appeal fees set forth in 37 CFR 41.20 have been increased since they were previously paid, then appellant must pay the difference between the increased fees and the amount previously paid.

A Supervisory Patent Examiner (SPE) has approved of reopening prosecution.

Double Patenting

2. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Art Unit: 2837

3. Claims 21-80 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-16 of U.S. Patent No. 6424799. Although the conflicting claims are not identical, they are not patentably distinct from each other. In reference to claims 21-43 and 60-66, the issued patent describes a system for controlling the power tool with narrower limitations, but the invention recited in pending claims is an obvious variation of the patented invention, it also has a tool having an output spindle, an electric motor for driving the spindle, a power switch; a controller for controlling the power switch, monitoring the speed of the motor, and reducing the frequency of a PWM drive signal from a sufficiently high frequency to a sufficiently low frequency due to variation in speed in order to drive the tool with successive burst of torque (ratchet mode). In reference to claims 44-56 and 67-80, the patented claims such as claims 7-13 recite a power tool with a first and a second operator actuating means for triggering power in the power tool and controlling the mode of operation of the motor between a smooth application of torque or cyclical variations in the torque applied to the spindle respectively. In reference to claims 57-59, patent claims such as 3-5 recite a control system for controlling the power to the motor by cyclically turning power ON and OFF (successive burst of torque) at a frequency of less than 50 Hz.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 2837

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 31-39, 44, 50, and 67-80 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bardwell et al (US patent 4066942) and Preis (US patent 4828049).

Claims 31 and 33, Bardwell et al teaches a control circuit for a power tool comprising a power switching device 342 for energizing the motor 238 and a controller for monitoring a characteristic such as current and adjusting the frequency of the drive signal in order to pulsate the output torque of the tool, see figure 5/7 and corresponding descriptions.

Claim 32, Bardwell et al describes the tool being connected to a DC power supply 216.

Claims 34-35, Bardwell et al describes the use of a level detector such as 31/43/62 for detecting the torque/current and compares the detected signal to a reference signal (predetermined signal) in order to determine if the detected signal is higher than the reference signal.

Claim 39, Bardwell et al describes switch 342 as a trigger switch.

Claim 44, Bardwell et al describes a first trigger switch 216 and a second switch 342 for determining the output torque (continuous or discontinuous).

Claim 50, Bardwell et al describes a first switch 216 and a second switch for causing the motor to operate in a pulse mode, see column 14 lines 61-68.

Art Unit: 2837

Claims 67-75, Bardwell et al describes in figure 5 how the power tool operates in a continuous mode see point 66 or in a second mode wherein power is supplied to the motor in a manner that imparts a non-uniform application of torque see point 71.

Claims 76 and 80, Bardwell et al describe a portable tool having a motor 238 and a switching means 342 interconnecting power to the motor for controlling application of power to the motor so the tool is operated in a pulse mode.

Claims 77-79, as described in figure 5 the tool is driven with a series of discontinuous rotational increments.

Bardwell et al fails to describe the use of an electric motor, but as described in column 2, the tool taught by Bardwell et al could also be power by other powering mediums.

However, Preis teaches a power-driven tool comprising the use air motor or electric motor. It would have been obvious to one person of ordinary skill in the art to use an electric motor over an air motor if the desired type of energy wanted to be used is electrical instead of compressed air.

Claims 36-38, Preis uses the measurement of speed to change the torque of the power tool.

6. Claims 45, 46, and 51-56 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bardwell et al (US patent 4066942) and Preis (US patent 4828049) as applied to claims 31-38, 44, 50, and 67-80 above, and further in view of Germanton et al (US Patent 5014793), of record.

The only difference between the subject matter of claims 45, 46, and 51-56 and the teachings of Bardwell et al/Preis is that the claims recite a retractable trigger as the type of switch being used to control the power to the motor. However, Germanton et al describes a portable power tool including retractable switch 17 for controlling the power/torque to the motor.

It would have been obvious to use a retractable switch to control the power to the motor, since retractable switches produce an output signal proportional to the pressure applied to the switch.

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The new documents cited in form PTO-892 describe other power tools using torque pulses to control the motor.

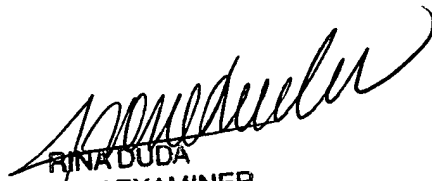
8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rina I. Duda whose telephone number is 571-272-2062.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Martin can be reached on 571-272-2107. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.


Art Unit: 2837

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

RD



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